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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,973	12/05/2001	Isao Torii	216861US3	1371

22850 7590 04/22/2003

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1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

RINEHART, KENNETH

ART UNIT	PAPER NUMBER
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3749

DATE MAILED: 04/22/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/001,973

Applicant(s)

TORII ET AL.

Examiner

Kenneth B Rinehart

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-25 is/are allowed.
- 6) ☒ Claim(s) 1 and 10-12 is/are rejected.
- 7) ☒ Claim(s) 2-9, 13 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 10-12 rejected under 35 U.S.C. 102(a) as being anticipated by Mitsubishi.

Mitsubishi shows first to fourth combustion sections (fig. 3), and wherein a fuel is supplied to said first combustion section (col. 15, lines 47-49), and a combustion exhaust gas is exhausted after said fourth combustion section (fig. 3), first to fourth airs are supplied to said first to fourth combustion sections in first to fourth air surplus rates (22, 23, 24, 18, fig. 3), respectively, said second air surplus rate is equal to or more than said first air surplus rate, said third air surplus rate is equal to or more than said second air surplus rate, and said fourth air surplus rate is equal to or more than said third air surplus rate (The apparatus in figure 3 is presently capable of performing this function), said first air surplus rate is in a range of 0.5 to 0.7, said second air surplus rate is in a range of 0.7 to 0.9, said third air surplus rate is in a range of 0.9 to 1.15, said fourth air surplus rate is in a range of 1.15 to 1.6 (The apparatus in figure 3 is presently capable of performing this function), a residence time of a combustion gas, in said first combustion section is in a range of 0.5 to 1.5 seconds (The apparatus in figure 3 is presently capable of performing this function), a residence time of a combustion gas in said first combustion section is in a range of 0.1 to 1.0 second, and a residence time of a combustion gas in said first combustion section is in a range of 1.5 to 2.5 seconds (The apparatus in figure 3 is presently

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capable of performing this function), said first combustion section is a fluidized bed combustion section (fig. 3), and has a first air supply port provided in a bottom of said first combustion section (18c, fig.3).

Allowable Subject Matter

Claims 15-25 are allowed.

Claims 2-9, 13, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth B Rinehart whose telephone number is 703-308-1722. The examiner can normally be reached on 7:30-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 703-308-1935. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-308-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0861.

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KBR

April 20, 2003

A handwritten signature in black ink, appearing to read "Kenneth Rinehart", with a stylized flourish at the end.

Kenneth Rinehart

Patent Examiner

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